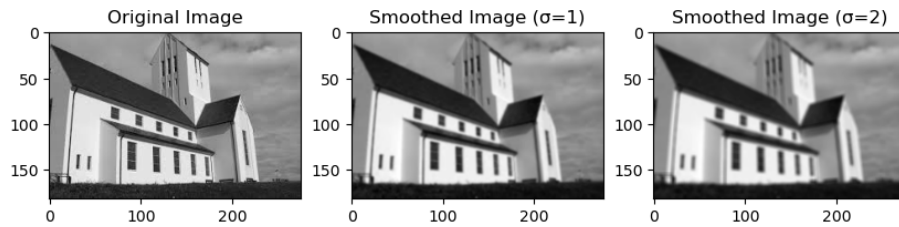# CS 4442 Assign 3

Riley Gavigan
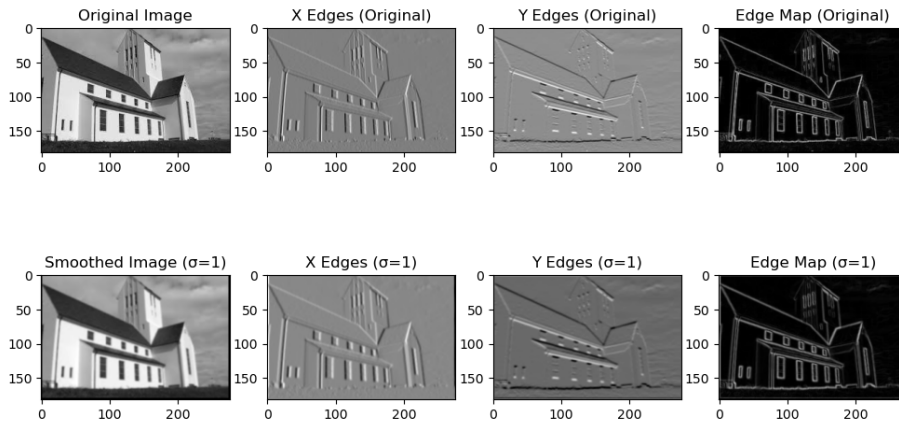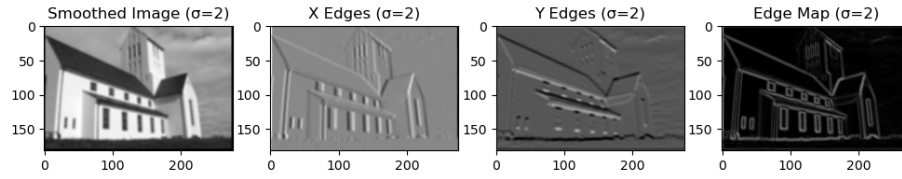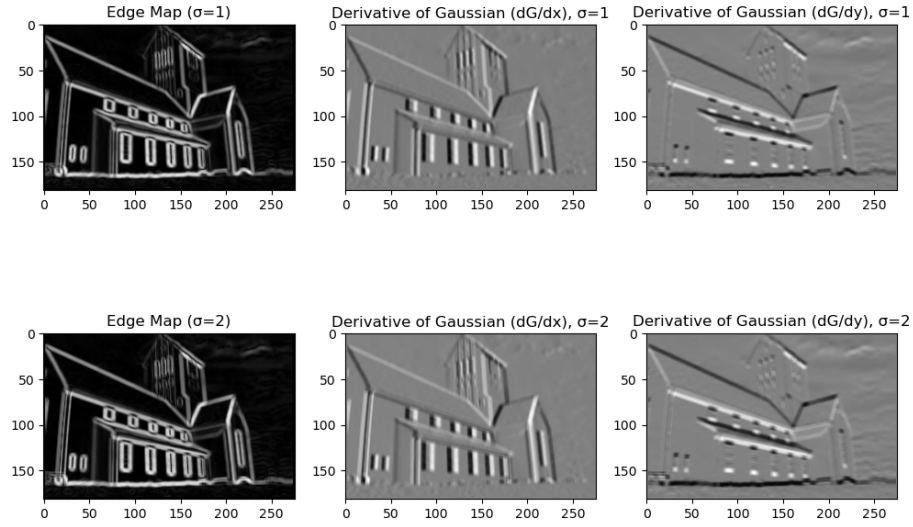
March 2024

1 Problem 1: Edge Detection

a:

b:

c:

The final output of c is significantly more accurate than the final output of b. By looking at the combined edge maps in both b and c, it is evident that the convolution process in part c better detects and captures the edges we are interested in reconstructing an image from.

The convolution process in part b leads to noise that displays edges that are seen as noise as they are irrelevant, as is evident by looking at the sky in the upper-right corner of the image. It also fails to detect the edges of the building as well as part c does, which can be observed by looking at the windows of the building in both images.

2   Problem 2: Corner Detection

Original Image   Harris Corner Response   Non-Maximum Suppression